

REMARKS

I. Status of the Claims

Claims 1-4, 6-15 are pending in the application. Claim 5 has been previously canceled.

II. Response to the Section 102(b) Rejection

Applicant traverses the rejection of claims 1-4, 6, 13-15 under 35 U.S.C. §102(b) as unpatentable under *Farley et al.* and respectfully ask the Examiner to reconsider and withdraw the rejection in view of the following remarks.

"A claim is anticipated only if each and every element as set forth in the claim is found either expressly or inherently described in a single prior art reference." see MPEP 2131.

Claim 1 contains the following elements: (i) a multilayer film comprising one layer of LLDPE and at least one layer of HDPE or MDPE; (ii) the multilayer film is oriented uniaxially in the machine direction; (iii) the multilayer film is oriented in the machine direction with a draw-down ratio effective to cause delaminating; and (iv) the delaminated film has an increase in the dart-drop strength with increasing draw-down ratio.

The examiner states in the Office Action:

"Farley et al. teach a method of orienting a multilayer film uniaxially in the machine direction with a draw-down ratio" (21:1) "effective to delaminate the film... Farley employ the same claimed materials with the same claimed process steps and conditions and as such, Farley et al. achieve the same claimed results", pg. 2, lines 14-18, pg.3, lines 1-2 of Final Rejection.

Applicant traverses the Examiner's above rejection. First, contrary to the Examiner's above assertion, *Farley et al.* does not use the same materials as Applicant claims. Applicant claims a multilayer film with one layer of LLDPE and

at least one layer of HDPE or MDPE. Unlike the claimed multilayer film, *Farley et al.* teaches the production of a polymer blend (VLDPE/HDPE) that is employed in multilayer films, see Abstract and pg. 31, last paragraph of *Farley et al.* The multilayer film taught by *Farley et al.* contains at least one layer prepared from the VLDPE/HDPE polymer blend. See page 34, lines 6-14 of *Farley et al.* *Farley et al.* does not teach a multilayer film with one layer of LLDPE and at least one layer of HDPE or MDPE.

Second, contrary to the Examiner's above assertion, *Farley et al.* does not teach orienting a multilayer film uniaxially in the machine direction. As discussed above, Applicant claims a machine-direction orientation (MDO) of a multilayer film, a post-treatment of a multilayer film after the multilayer film is manufactured. *Farley et al.* does not disclose MDO of multilayer film. Instead *Farley et al.* teaches a chill roll casting process, and a blown film process for manufacturing multilayer films, pg. 34, lines 26 - 35. In the casting process the polymers are co-extruded into a multilayer film by forcing the polymers through a die gap opening (600 microns), and drawing down the film to a final gauge (20 microns). The draw-down ratio disclosed in the reference that the examiner relies on in this rejection (21:1) is based on the ratio of the die opening (600 microns) to the final film thickness (20 microns). The draw-down ratio as used by applicant is a ratio of the initial multilayer film thickness (before orienting the film) to the final film thickness (after orienting the film uniaxially in the machine direction).

Third, contrary to the Examiner's above assertion, *Farley et al.* does not teach or suggest delaminating a multilayer film. The Examiner's "delamination" argument appears to be based on inherency. An inherency argument requires the examiner to "point to the 'page and line' of the prior art which justifies an inherency theory." Ex. parte Schricker, 56 USPQ2d 1723 (B.P.A.I. 2000) (unpublished). As discussed above, *Farley et al.* teaches how to make a multilayer film by casting or blown film process. It will upset the purpose of *Farley et al.* that the film is delaminated during the casting or blown film process.

Fourth, the Examiner just speculates that *Farley et al.* will "achieve the same claimed results." As discussed above, the claimed multilayer film is delaminated to achieve an increase in the dart-drop strength with increasing draw-down ratio. Given that *Farley et al.* does not teach MDO of a multilayer film and that it does not teach MDO of the multilayer film to cause delamination, *Farley et al.* cannot achieve the claimed result, that is, an increase in the dart-drop strength with increasing draw-down ratio.

The Examiner's above anticipation rejection fails if any one of the above four claim elements is not met by *Farley et al.* In fact, as discussed above, none of the four claim elements can be found from *Farley et al.* Thus, the Examiner has improperly rejected Applicant's claims and Applicant respectfully asks the Examiner withdraw the rejection.

III. Response to the Section 103(a) Rejection

Applicant traverses the rejection of claims 7-12 under 35 U.S.C. §103(a) as being obvious over *Farley et al.* and respectfully requests that the Examiner reconsider and withdraw the rejection in view of the following remarks.

The Examiner's §103(a) rejection is improper because the Examiner has not established a prima facie case of obviousness. A proper analysis under §103 requires consideration of three factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or carry out the claimed process; (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success and (3) whether the prior art reference(s) teach or suggest all the claim limitations." (Emphasis added by Applicant). In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991); MPEP 2142, 2143.

Note that claims 7-12 depend from claim 1, and thus they incorporate all the limitations of claim 1. The examiner has not rejected claim 1 for obviousness

over *Farley et al.* Instead the Examiner piecemealed the reference and found the claimed molecular weights Mw and Mn ranges and concluded that:

“polyethylenes with the properties as claimed are readily available and routinely employed ... and would have been utilized by the ordinary skilled artisan at the time of the claimed invention”, page 4, lines 8-10.

As discussed in Section II of this response, *Farley et al.* fails to teach or suggest any of the four elements of claim 1. Thus *Farley et al.* cannot make claim 1 obvious. For the same reason, *Farley et al.* cannot make claims 7-12 obvious because they incorporate all elements of claim 1.

Therefore applicant respectfully requests the examiner to reconsider and withdraw the rejections and pass this application to issue. Applicant invites the Examiner to phone his attorney Mr. Shao-Hua Guo at 610 359 2455 if further discussion of the application is helpful.

Respectfully submitted,
D. Ryan Breese

By: Shao-Hua Guo

Shao-Hua Guo
Attorney for Applicant
Reg. No. 44,728
Lyondell Chemical Company
Phone: (610) 359-2455
April 17, 2007

Customer Number: 24114